

THAT WHICH IS CLAIMED:

5 1. A method for performing a contingent claim valuation comprising:
determining a present value distribution of contingent future benefits attributable
to the exercise of the contingent claim at a subsequent time, wherein determining the
present value distribution of contingent future benefits comprises discounting a
distribution of contingent future benefits according to a first discount rate;

10 determining a present value of a contingent future investment required to exercise
the contingent claim at the subsequent time based upon a second discount rate that need
not equal the first discount rate; and
determining a value of the contingent claim based upon the present value
distribution of contingent future benefits and the present value of the contingent future
investment.

15 2. A method according to Claim 1 wherein determining the value of the
contingent claim comprises determining an average of the difference between the present
value distribution of contingent future benefits and the present value of the contingent
future investment.

20 3. A method according to Claim 2 wherein, at the time at which the
contingent claim is to be exercised, a potential loss remains a possible outcome, and
wherein determining the average comprises limiting the difference between the present
value distribution of contingent future benefits and the present value of the contingent
future investment to a minimum value of zero in instances in which the present value
distribution of contingent future benefits is less than a difference of the present value of
the contingent future investment and the potential loss.

25 4. A method according to Claim 1 wherein determining the present value
distribution of contingent future benefits comprises determining the present value
distribution of contingent future benefits of a distribution of contingent future benefits
that has a non-log normal distribution.

5. A method according to Claim 1 wherein determining the present value of the contingent future investment comprises determining the present value distribution of contingent future investments of a distribution of contingent future investments required to exercise the contingent claim at the subsequent time.
- 5 6. A method according to Claim 1 wherein determining the present value of a contingent future investment required to exercise the contingent claim at the subsequent time comprises discounting the contingent future investment by a risk free rate of discounting.
- 10 7. A method according to Claim 1 wherein determining the present value distribution of contingent future benefits comprises discounting the distribution of contingent future benefits by a weighted average cost of capital.
- 15 8. A method according to Claim 1 further comprising:
repeating the determination of the present value distribution of contingent future benefits, the present value of a contingent future investment and the value of a contingent claim in order to value each of a series of contingent claims; and
refining the valuation of each contingent claim with the determination of the present value distribution of future benefits of a respective contingent claim comprising determining the present value of the value previously determined for an immediately succeeding contingent claim.
- 20 9. A method according to Claim 1 wherein a project comprises a pilot phase extending from an initial time to the subsequent time and a commercial phase following the subsequent time and contingent upon the exercise of the contingent claim, wherein the method further comprises obtaining a distribution of net operating profit at the subsequent time contingent upon the exercise of the contingent claim, and wherein the distribution of net operating profit is the distribution of contingent future benefits.
- 25 10. A system for performing a contingent claim valuation comprising a processing element capable of determining a present value distribution of contingent future benefits attributable to the exercise of the contingent claim at a subsequent time,

wherein said processing element determines the present value by discounting a distribution of contingent future benefits according to a first discount rate, said processing element also capable of determining a present value of a contingent future investment required to exercise the contingent claim at the subsequent time based upon a second discount rate that need not equal the first discount rate, and said processing element further capable of determining a value of the contingent claim based upon the present value distribution of contingent future benefits and the present value of the contingent future investment.

11. A system according to Claim 10 wherein said processing element determines the value of the contingent claim by determining an average of the difference between the present value distribution of contingent future benefits and the present value of the contingent future investment.

12. A system according to Claim 11 wherein, at the time at which the contingent claim is to be exercised, a potential loss remains a possible outcome, and wherein said processing element limits the difference between the present value distribution of contingent future benefits and the present value of the contingent future investment to a minimum value of zero in instances in which the present value distribution of contingent future benefits is less than a difference of the present value of the contingent future investment and the potential loss.

13. A system according to Claim 10 wherein said processing element is capable of determining the present value distribution of contingent future benefits of a distribution of contingent future benefits having a non-log normal distribution.

14. A system according to Claim 10 wherein said processing element is capable of determining the present value distribution of contingent future investments of a distribution of contingent future investments required to exercise the contingent claim at the subsequent time.

15. A system according to Claim 10 wherein said processing element determines the present value of a contingent future investment required to exercise the

contingent claim at the subsequent time by discounting the contingent future investment by a risk free rate of discounting.

16. A system according to Claim 10 wherein said processing element determines the present value distribution of contingent future benefits by discounting the 5 distribution of contingent future benefits by a weighted average cost of capital.

17. A system according to Claim 10 wherein said processing element repeats the determination of the present value distribution of contingent future benefits, the present value of a contingent future investment and the value of a contingent claim in order to value each of a series of contingent claims, and wherein said processing element 10 refines the valuation of each contingent claim with the determination of the present value distribution of future benefits of a respective contingent claim being determined based upon the present value of the value previously determined for an immediately succeeding contingent claim.

18. A system according to Claim 10 wherein a project comprises a pilot phase 15 extending from an initial time to the subsequent time and a commercial phase following the subsequent time and contingent upon the exercise of the contingent claim, wherein said processing element initially obtains a distribution of net operating profit at the subsequent time contingent upon the exercise of the contingent claim, and wherein the distribution of net operating profit is the distribution of contingent future benefits.

20 19. A computer program product for performing a contingent claim valuation, the computer program product comprising a computer-readable storage medium having computer-readable program code portions stored therein, the computer-readable program code portions comprising:

25 a first executable portion for determining a present value distribution of contingent future benefits attributable to the exercise of the contingent claim at a subsequent time, wherein said first executable portion is adapted to determine the present value by discounting a distribution of contingent future benefits according to a first discount rate;

a second executable portion for determining a present value of a contingent future investment required to exercise the contingent claim at the subsequent time based upon a second discount rate that need not equal the first discount rate; and

5 a third executable portion for determining a value of the contingent claim based upon the present value distribution of contingent future benefits and the present value of the contingent future investment.

10 20. A computer program product according to Claim 19 wherein said third executable portion is adapted to determine the value of the contingent claim by determining an average of the difference between the present value distribution of contingent future benefits and the present value of the contingent future investment.

15 21. A computer program product according to Claim 20 wherein, at the time at which the contingent claim is to be exercised, a potential loss remains a possible outcome, and wherein said third executable portion limits the difference between the present value distribution of contingent future benefits and the present value of the contingent future investment to a minimum value of zero in instances in which the present value distribution of contingent future benefits is less than a difference of the present value of the contingent future investment and the potential loss.

20 22. A computer program product according to Claim 19 wherein said first executable portion is adapted to determine the present value distribution of contingent future benefits of a distribution of contingent future benefits that has a non-log normal distribution.

25 23. A computer program product according to Claim 19 wherein said second executable portion is adapted to determine the present value distribution of contingent future investments of a distribution of contingent future investments required to exercise the contingent claim at the subsequent time.

24. A computer program product according to Claim 19 wherein said second executable portion is adapted to determine the present value of a contingent future

investment required to exercise the contingent claim at the subsequent time by discounting the contingent future investment by a risk free rate of discounting.

25. A computer program product according to Claim 19 wherein said first executable portion is adapted to determine the present value distribution of contingent future benefits by discounting the distribution of contingent future benefits by a weighted average cost of capital.

26. A computer program product according to Claim 19 wherein said first, second and third executable portions repeat the determination of the present value distribution of contingent future benefits, the present value of a contingent future investment and the value of a contingent claim in order to value each of a series of contingent claims, and wherein the computer program product is adapted to refine the valuation of each contingent claim with said first executable portion adapted to determine the present value distribution of future benefits of a respective contingent claim based upon the present value of the value previously determined for an immediately succeeding contingent claim.

27. A computer program product according to Claim 19 wherein a project comprises a pilot phase extending from an initial time to the subsequent time and a commercial phase following the subsequent time and contingent upon the exercise of the contingent claim, wherein the computer program product further comprises a fourth executable portion for obtaining a distribution of net operating profit at the subsequent time contingent upon the exercise of the contingent claim, and wherein the distribution of net operating profit is the distribution of contingent future benefits.